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Via Electronic and U.S. Mail

Ms. Sammie Cervantes Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825 (Cervantes@mpusbr.gov)

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Ms. Dolores Brown Chief, Mitigation and Restoration Branch Department of Water Resources 3251 "S" Street Sacramento, CA 95816 (Dolores@water.ca.gov)

Draft Environmental Impact Statement/Environmental Impact on the Re: Environmental Water Account

Dear Ms. Cervantes and Ms. Brown:

I am writing on behalf of the San Luis & Delta-Mendota Water Authority (Authority) and its member agencies1 in response to the July 14, 2003 news release issued by the United States Bureau of Reclamation (Reclamation), which requested written comments on the draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) covering future operation of the CalFed-Bay Delta Program's Environmental Water Account (EWA).

The Authority is a Joint Powers Authority whose member agencies contract with Reclamation for the supply of Central Valley Project (CVP or Project) water. Project water supplied to the Authority's member agencies is pumped from the Sacramento-San Joaquin River Delta (Delta) through the Tracy Pumping Plant and is used to satisfy the water needs of over 1,000,000 acres of highly productive agricultural land in the western San Joaquin Valley, San Benito County, and Santa Clara County. Authority members also provide approximately 200,000 acre-feet of water for municipal and industrial uses, primarily in the Santa Clara Valley,

¹ The Authority's member agencies are: Banta-Carbona Irrigation District; Broadview Water District; Central Calif. Irrigation District; Centinella Water District; City of Tracy; Columbia Canal Company; Del Puerto Water District; Eagle Field Water District; Firebaugh Canal Water District; Fresno Slough Water District; Grassland Water District; James Irrigation District; Laguna Water District; Mercy Springs Water District; Oro Loma Water District; Pacheco Water District; Pajaro Valley Water Mgmt. Agency; Panoche Water District; Patterson Water District; Plain View Water District; Pleasant Valley Water District; Reclamation District 1606; San Benito County Water District; San Luis Canal Company; San Luis Water District; Santa Clara Valley Water District; Tranquillity Irrigation District; Turner Island Water District; West Side Irrigation District; West Stanislaus Irrigation District; Westlands Water District; and Widren Water District.

and 250,000 to 300,000 acre-feet of water for waterfowl and wildlife habitat in the San Joaquin Valley. The Authority and its member agencies have suffered from one of the problems the EWA is intended to address (an unreliable water supply associated with fish recovery actions), and therefore have a vital interest in the EWA and thus the Draft EIS/EIR.

The Authority supports a renewed commitment by the lead agencies – Reclamation and California Department of Water Resources – and the cooperating agencies – United States Fish and Wildlife Service, National Marine Fisheries Service, and the California Department of Fish and Game – to implement the EWA and provide a multi-year commitment for CVP and SWP project operations under the federal Endangered Species Act. The Authority's support for a renewed EWA, however, is contingent upon the EWA being consistent with the overall goals of the CalFed Program, which requires the EWA to: (1) serve the purposes described in the CalFed record of decision, (2) be part of a package of projects, including an operational Harvey O. Banks Pumping Plant at 8,500 cubic feet per second, operable barriers, the Delta Mendota Canal-California Aqueduct Intertie, and other operations consistent with draft Napa Proposition; (3) be implementable with no uncompensated water cost to the water users and no net increased incremental costs upon the CVP or SWP; and (4) promote recovery of listed species. The Authority provides the following comments on the Draft EIS/EIR to ensure that the final EIS/EIR and the future EWA are consistent with those principles.

I. General Comments

A. The EWA must be described in a manner consistent with CalFed

The Authority is concerned that the Draft EIS/EIR does not reflect and is not necessarily consistent with the draft Napa Proposition, or the discussions resulting therefrom. As noted above, the concepts expressed in the draft Proposition and discussed thereafter are of vital importance to achieving the goals of CalFed and to the Authority and its member agencies. The Authority makes the following observations:

- The Draft EIS/EIR should consider the actions that may develop EWA assets currently being discussed for a longer-term EWA, like wet-dry year exchanges and use of storage projects south of the Delta.
- The Draft EIS/EIR should discuss the proposals put forth in the draft Proposition, including actions that would allow for additional source shifting beyond that contemplated for the EWA, or use of the Harvey O. Banks pumping plant to move 100,000 acre-feet of CVP water for CVP refuges.



- The Draft EIS/EIR considers the environmental impacts of an EWA for a four-year period, but the draft Proposition, and discussions resulting therefrom, contemplate a longer-term EWA.
- The Draft EIS/EIR considers an EWA with assets up to 600,000 acre-feet of water, but (1) provides no indication of whether the assets, as described, are needed for jeopardy avoidance or restoration, and (2) are higher than the assets currently being discussed.

To avoid these perceived inconsistencies with the draft Proposition and the discussions resulting therefrom, and to ensure an EWA that is consistent with the overall goals of CalFed, the Authority proposes: (1) that the scope of actions contemplated for the development of assets for new EWA be expanded to include the tools currently being discussed, and (2) that DWR certify the final EIS/EIR for a one-year period and Reclamation issue a record of decision authorizing the EWA for only one year to allow for separate, future environmental review that considers an EWA developed from the existing discussions.

B. Description of the EWA

As part of a viable EWA supported by all interests, there must be mechanisms in place to assure that future policy decisions about the size and use of EWA assets are based on the best scientific information then available. To achieve that goal, the Authority believes the final EIS/EIR should describe an EWA that includes the following three elements.

First, the proposed structure for the EWA should include the continuation of the current EWA science review panel to evaluate the annual management decisions of the EWA. Second, the structure for the EWA should include a comprehensive science program that would periodically evaluate the Tier 1 regulatory baseline and Tier 2 EWA assets, and their use as part of an integrated plan to protect and restore fish, wildlife, and habitat, while protecting water supply reliability. Finally, the EWA should include a cost effective fisheries plan that allows for periodic changes in the size and use of EWA assets based on the best available science. In other words, the proposed action/proposed project should include:

- Continuation of the EWA science review panel;
- Acceleration of regulatory mechanisms to accommodate revised scientific understanding;
- Implementation of more real-time flexible Tier 1 requirements to better meet fishery and
 water supply needs and develop the use of "trade-offs" among water and non-water
 related actions which could benefit fish without impacting other environmental
 considerations or water supply reliability;



- Tri-annual EWA reviews by the Management and Project Agencies that integrate the latest scientific information into policy decision-making concerning how to best use the EWA assets;
- Consideration in CalFed forum, similar to the South Delta Fish Facility Forum, of the
 policy implications of the latest scientific information and provides advice to the
 Management and Project Agencies about policy decision-making related to the best use
 of the EWA assets; and
- Employment of mechanisms to ensure that the needs related to agency decision-making drive the CalFed science effort.

The Authority's support for such an EWA is reflected in its expressed commitment to work with the Management and Project Agencies to: (1) identify and secure specific assets, and (2) develop a finance plan, including sources of funds to secure capital assets and annual operation and maintenance expenses required to accomplish EWA purposes.

C. Question of Effect on Direct Mortality

The final EIS/EIR should include a response to the recent presentation by Sheila Greene, which appeared to show that the existing EWA has a relatively small impact on avoiding direct mortality (take) of salmon at either the Harvey O. Banks or Tracy Pumping Plants. According to Greene, 2002-3 EWA actions reduced the direct mortality to Winter Run outmigrants by 0.014 percent of the estimated number entering the Delta. In 2001-2, the corresponding number was 0.009 percent of those entering the Delta and 0.12 percent of those leaving the Delta (surviving to Chipps Island).

In that year, 0.07 percent of older juvenile salmon leaving the Delta were saved by EWA actions and 0.03 percent of the fry/smolt. Corresponding numbers in 2000-1 were, for Winter Run, 0.02 percent of those entering the Delta, 2.8 percent of those leaving, for older juveniles, 1.7 percent of those leaving the Delta, and for fry/smolt, 0.51 percent of those leaving the Delta. These data raise questions regarding whether existing use of EWA assets have been effective in promoting recovery. For that reason, the EIS/EIR should provide a response to those data.

D. Question of Effect on Indirect Mortality

Similarly, the final EIS/EIR should address recent questions raised regarding the effects of EWA on indirect mortality (more precisely, "export-related indirect mortality"). Specifically, at the recent CalFed Science Symposium, Bryan Manly reported on his review of three analyses that should provide evidence of the significance of indirect, export-related mortality - the three analyses are Ken Newman's analysis of approximately 60 pairs of releases of fall run smolts,



Brandes' (USFWS) analysis of the VAMP and some pre-VAMP data, and Brandes' analysis of results of the late fall run December-January (AFRP Action 8) experiment.

- Manly concluded that for the VAMP analysis: "Correlation between flow and exports is clouding the picture . . . Probably some real experimental perturbations to the system are needed to clarify what is going on."
- For the Jan-Dec analysis: "Temperature seems to account for survival variation without any export effects... but one data point may be responsible for this... Again, some experimental manipulations may be required to properly assess the effects of exports."
- For the Newman analysis: "All the models . . . have questionable aspects in terms of assessing the statistical significance of the effects of covariates [including exports] on survival." (parenthetical remark added).

Newman concurred with Manly's assessment. A response to this position in the final EIS/EIR is particularly important because, even if one were to set the uncertainties aside and assume that the statistical analyses are significant, the effects of EWA actions on smolt survival through the Delta are relatively small, at a large cost of EWA assets.

E. Ouestion of Effect on Delta Smelt

The final EIS/EIR should respond to the lack of peer reviewed data on the effect of existing EWA actions, or Delta exports in general, on the population size of Delta Smelt. For example, while Kimmerer has presented results of an analysis showing effects as high as 25 to 30 percent of the population, these results may be questioned, not only because the analyses have not been available for review, but also because Bennett, author of the long-anticipated CalFed Delta Smelt white paper, has presented data showing that high take of smelt may have little effect on population levels.

F. Use of EWA Resources

Use of EWA resources for purposes other than export reductions should be evaluated. The EIS/EIR does not discuss the effects of using EWA resources upstream, for example. It is possible that use of EWA resources for purposes other than export curtailments could provide greater fish benefits than the use for export curtailments.



II. Specific Comments

A. Salvage Reduction

Analyses in Chapter 9 indicate reduced fish salvage at the export pumps is a primary purpose of the EWA. This is acknowledged at the bottom of page A1-55, in the "Modeling" attachment to the Draft EIS/EIR. To demonstrate that this purpose is being served, the Draft EIS/EIR includes statements regarding the overall benefit the EWA may have on salvage rates.

However, the Draft EIS/EIR does not evaluate the effect of salvage reduction on population levels. The primary purpose of the existing EWA, as stated in the CalFed record of decision, is protection and recovery of fish. Therefore, population level effects must be estimated. It is possible, in fact, likely, that impressive reductions in salvage amount to trivial effects on population levels. If this is the case, an evaluation of the effects of the EWA relative to its population level effects, that is, to its purpose (protection and recovery of fish), may provide a markedly different result than an evaluation based on salvage alone.

This comment aside, the treatment of salvage effects is incomplete. Statements in Chapter 9, pages 255 to 259 to the Draft EIS/EIR suggest the preferred EWA alternative will reduce average annual fish salvage by about 136,000 delta smelt, 1.1 million salmon, 29,000 steelhead, 1 million splittail, and 9 million striped bass. These implications, however, do not appear correct. Tables 9-56, 9-57, 9-58, 9-59 and 9-60 (duplicating tables in Attachment 1) show that these numbers are total estimated salvage reductions over the 15 year modeling period. If that is correct, actual estimated average annual reductions in fish salvage appear to be about 9,000 delta smelt, 75,000 salmon, 1,900 steelhead, 68,000 splittail and 596,000 striped bass. The final EIS/EIR must be modified to eliminate this apparent error.

Further, the above estimates are based on 1979-1993 historical fish salvage, and are likely to be over-estimates (Attachment 1, pages A1-60 and A1-61). They estimate total salvage, not adult equivalent salvage. Because of the high natural mortality of juvenile fish, many salvaged fish would not live to maturity in any case. The importance of adult equivalent salvage for striped bass is mentioned in Chapter 9 on page 260, but the issue of adult equivalence is not properly addressed. To be more accurate, the final EIS/EIR should be modified to estimate effects of reduced fish salvage in terms of adult equivalent fish.

B. EWA effects on fish upstream from the Delta

The elaborate and exhaustive analysis of the existing EWA effects upstream from the Delta (pages 127-249) should be relegated to an appendix. The analyses make it clear that the EWA will produce no significant effects on fish upstream from the Delta.



C. EWA effects on Bay/Delta fish

The final EIS/EIR must acknowledge that changes in X2 and outflow are different aspects of the same regulatory tool, neither of which provide an independent measures of FWA effects. Species whose abundance has been shown to correlate with increased springtime outflow are longfin, flounder, Crangon shrimp, and total candean shrimp (including Crangon). The "fish/X2" relations between abundance (A) of these species and X2 are equivalent to relations of the form A = C Qk, where Q is Delta outflow and the exponents k for each species are determined by Prof. Newman's January 2003 regression analyses. Table 9-52 indicates the EWA will increase monthly Delta outflow by an average of 6 percent or less in January-June. An average increase of 6 percent in monthly Delta outflow can be expected to increase abundance between [95 percent confidence interval] 6 – 10 percent for longfin smelt, 1 – 8 percent for starry flounder, 2-5 percent for Crangon shrimp, and 1 – 3 percent for all caridean shrimp (including Crangon).

Similarly, there are no correlations between the export/inflow (F/I) ratio, or QWEST ("reverse flow") and any reliable indicators of ecosystem condition or species abundance. Using E/I and QWEST as "indicators of changes in habitat conditions" [pages 9-95 and 9-96] is completely unjustified and continues to propagate historical errors. Residual "reverse flows" (indicated by QWEST) are now known to be totally irrelevant because of the dominance of tidal flows in the Delta. All discussions of QWEST and "reverse flows" should therefore be removed from the Draft EIS/EIR, including all discussions in Chapter 9, in Table 9-4, and on page 5-26. All discussions of the E/I ratio, except in relation to project operating requirements, should also be removed from the Draft EIS/EIR.

Finally, Chapter 9 on page 54 discusses the (non-existent) "entrapment zone," once erroneously claimed to be associated with X2. Discussions of the fictitious "entrapment zone" should be removed from the Draft EIS/EIR, to avoid further propagation of historical errors.

D. Indirect Impacts Caused By EWA Water Purchases

The Draft EIS/EIR fails to consider the indirect impacts caused by the acquisition of EWA assets. Historically, EWA acquisitions increased market cost for and reduced the availability of transfer water. That historic trend is expected to continue during the period considered in the Draft EIS/EIR, particularly given the size of EWA assets contemplated. Nevertheless, the Draft EIS/EIR fails to consider the following environmental impacts, which will likely result from that trend: increased land fallowing, increased occurrences of land subsidence, decreased groundwater levels, and decreased quality of applied water. Those impacts will be particularly significant for South of Delta agricultural water users, who have historically relied on transfers, and who are now competing with the EWA for water. To ensure



an adequate environmental analyses, the final EIS/EIR must consider indirect impacts of the like discussed above.

Thank you for your consideration of the Authority's comments.

Sincerely,

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